

**Downham Rural District Council.**

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**ANNUAL REPORT**

OF THE

**MEDICAL OFFICER OF HEALTH**

FOR THE

**Year ending 31st December, 1905.**

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**GEO. FRED. CROSS, M.B., B.S.,**

*Medical Officer of Health.*

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Downham Market,

*February 16th, 1906.*

TO THE CHAIRMAN AND MEMBERS OF THE DOWNHAM  
RURAL DISTRICT COUNCIL.

GENTLEMEN,

In presenting you with my tenth Annual Report I have to thank you for the hearty co-operation that I have always received from you. The work of the Medical Officer of Health has, during the past few years, greatly increased, and is attended with great responsibility and at times with grave anxiety. I have, as far as possible, done my best to carry out the duties entrusted to me. It is often a very difficult matter to become cognisant of all the various nuisances that continually are cropping up in the 37 parishes of this District, which covers an area of 82,834 acres, and contains a population of about 15,000 people.

The work of your Inspector and myself would be greatly lightened if you would communicate direct with us on any complaints or matters that require attention in your respective parishes.

In spite of all the sanitary improvements that have been carried out in every village, fresh nuisances are continually arising, and the general public seem quite at a loss as to where to apply to have such rectified or inquired into, and my information of such often only comes in a very roundabout way. We cannot be held responsible for people being untidy, careless not only of their own welfare, but of that of others. We cannot alter the natural features of the district, which make our water supply unsatisfactory; and we have no power either to condemn badly-constructed houses or to prevent the erection of unsuitable new ones. Many of the nuisances complained of could often have been rectified by a little attention and care on the part of people living in the immediate neighbourhood. It is surprising how diseases are treated with contempt when they occur at a distance, and yet how different is the case when they occur at home. Many people are apt to think that sanitary officials are too energetic, but the reverse is the case when an epidemic threatens.

## WATER SUPPLY.

It is now fully recognised that an abundant supply of pure water is an essential factor in the preservation of public health. Its absence from one community may render that community a source of danger to others. Water supply should become a national question. The expense of procuring a pure water supply in a Rural District would be far too heavy to be borne alone. Until, however, it does become so we must endeavour to safeguard, as far as possible, our present supply. Drinking impure water may not necessarily produce a specific disease, but it does undoubtedly tend to lower the vitality of the system.

The subject of the supply of this district is one that occupies a great deal of thought.

The highland portion of the district is mainly supplied with shallow wells. For several years I have drawn your attention to the danger of these becoming polluted. The upper three feet or so of the soil—the “living earth”—swarm with bacteria, whose function is to break up and oxidise dead organic matter into mineral salts, thereby rendering it fit for absorption as the food of plants while innocuous to animal life. The more highly cultivated and worked the soil, the greater its power, which is, however, lost if the soil becomes sodden or water-logged. Below a depth of four feet the bacteria disappear and the soil is dead. Thus slops, liquid manure and human excreta may be dug into the garden and become purified and rendered harmless as well as acting as a manure. But the majority of wells are, through want of space, or for convenience, close to the houses, close to privies, and close to drains. Badly-constructed drains soon get out of order, and the slops which they should take are, as often as not, thrown out of the back door, possibly within a few feet of a well.

There has been a large rainfall this year, and I have found many wells seriously polluted, and my analyses have been confirmed by independent analyses of samples sent to London.

Therefore, we ought to ensure, as far as possible, that the existing wells, where their situation is in any way at all safe, should be free from all risks of pollution, and where they are not they should be done away with. It would be better for people to get their water from a little distance than to have an unsatisfactory supply near to them.

Many of the wells in the district are not properly constructed. I believe it is possible to render water in shallow wells fairly good and harmless. The tops of wells should be raised, puddled round with clay and cement. The cement should also be carried down the well to a considerable depth. Pumps should be fixed to all wells. Another method I have seen proposed is to fill the well to the height of high water with gravel stone, and, from this point to the top of the well, with sand, and sinking an iron pipe to the bottom of the gravel.

Open ponds, if well fenced off, might often be utilized.

At Shouldham the two public pumps have so far been very satisfactory.



In one part of the village of Denver the water has been found to be very polluted, and I have advised the Parish Council to sink a well where good water might be obtained and carry it down to a pump where it could be made of general use.

The water in the fen district is mainly rain water, collected and stored in eisterns and tanks. This, while it lasts, gives a pure supply. It seems a great pity that more use cannot be made of river water, with which this part of the district is well supplied; but until the pollution to which the rivers are subjected is done away with the water can never be safe.

We have in Marham an excellent supply which is taken to another county. However, a great boon has been procured by the inhabitants of St. German's and Magdalen from their having been able to secure this water from the main, and it is to be hoped that other parishes, such as Watlington, will be able to secure such an excellent supply also.

### SANITARY WORK OF THE YEAR.

I should like here to touch upon the most important problem as to the best method of dealing with the human excreta. For some years, not only in this, but in many other rural districts, it has been thought best to enforce the substitution of earth closets for the old privies. At the same time, however, no objection has been made to a properly cemented vaults. Indeed, these latter are in some cases preferable, more especially where there is no suitable ground, as is so often the case, on which the pails can be emptied. But if earth closets are to be general throughout the district a properly-conducted system of scavenging, such as is being carried out at Hilgay, must be arranged for every village. I would therefore urge that your attention should be given to this matter during the coming year.

Examination of the Journal of the Sanitary Inspector for the year shows:—

- 32 nuisances from defective drains and ditches
- 39 foul privies and earth closets cleaned
- 7 new privies built
- 15 new earth closets provided
- 38 nuisances from ash bins and manure heaps
- 6 cases of overcrowding were dealt with, of which
  - 2 were abated by lodgers leaving
  - 3 houses were enlarged
  - 1 tenant left
- 9 houses were found in a dirty state, and
  - 1 was re-roofed
  - 5 empty
  - 9 repaired
- 17 houses have been wholly or partly fumigated after infectious diseases, and disinfectants have been supplied where necessary

The bake-houses and slaughter-houses in the district have been visited and are in a satisfactory condition.

A case of infectious disease (scarlet fever) was reported to me by

the Inspector. As no medical man had been called in I had received no notification. On reporting the case to you it was decided to write a warning letter to the parent for failing to notify.

In two cases infected bedding and clothes were destroyed and compensation made.

### FACTORY ACT.

The out-workers have been visited and their premises found clean.

In the early part of the year two of the out-workers were living in a house in which there was a case of scarlet fever. Work was at once stopped, and the two young women obtained lodgings, and no further cases occurred.

I have inspected the Register of Workshops, and the Annual Report on the administration of this Act is herewith appended.

Anthrax broke out amongst some bullocks at Wormegay, and, visiting the premises, I found that every precaution had been taken, and fortunately no one contracted the disease.

### INFECTIOUS DISEASES.

The number of infectious diseases notified during the year was 88.

The following table shows the distribution :—

**Table A.**

DISTRICT.	Scarlet Fever.	Enteric.	Diphthe- ria.	Erysipe- las.	Total.
DOWNHAM DISTRICT—					
Southery ... ..	2	...	...	3	5
Welney ... ..	...	1	2	...	3
Ten-Mile Bank ... ..	1	1	...	1	3
Hilgay ... ..	1	1	...	1	3
Ryston ... ..	1	...	...	...	1
Fordham ... ..	1	...	...	...	1
Denver ... ..	4	...	...	...	4
Bexwell ... ..	...	...	...	1	1
Downham West ... ..	1	...	...	2	3
WIGGENHALL DISTRICT—					
St. German's ... ..	18	...	...	1	19
St. Peter's .. ..	10	...	...	...	10
Tottenham ... ..	1	...	...	...	1
Watlington ... ..	1	1	...	...	2
Holme ... ..	...	...	...	1	1
Magdalen ... ..	...	2	...	...	2
Shouldham ... ..	...	1	...	...	1
Stow ... ..	1	...	...	1	2
Wimbotsham .. ..	1	1	...	3	5
FINCHAM DISTRICT—					
Fincham ... ..	...	21*	...	...	21
Totals .. ..	43	29	2	14	88

\* This is the number of cases notified up December 31st, 1905.

The following table shows the prevalence of these diseases throughout the various months of the year:—

**Table B.**

MONTH.	Scarlet Fever.	Enteric Fever.	Diphthe- ria.	Erysipe- las.	Total.
January ... ..	1	...	...	...	1
February ... ..	...	...	2	2	4
March .. ...	2	3	...	1	6
April ... ..	3	...	...	...	3
May ... ..	7	1	...	...	8
June ... ..	1	...	...	...	1
July ... ..	1	...	...	..	1
August ... ..	4	1	...	2	7
September ... ..	4	1	...	2	7
October .. ...	12	...	...	3	15
November ... ..	6	1	...	2	9
December ... ..	2	22	...	2	26

The following table compares the number of principal notifiable diseases during the past ten years:—

**Table C.**

YEAR.	Scarlet Fever.	Enteric Fever.	Diphthe- ria.	Erysipe- las.	Puer- peral.	Total.
1896	49	7	28	13	1	98
1897	97	11	16	15	1	140
1898	9	4	34	10	1	58
1899	17	3	6	9	...	35
1900	19	11	1	6	..	37
1901	49	9	10	7	...	75
1902	75	7	36	4	...	122
1903	26	23	3	7	1	60
1904	45	2	1	7	...	55
1905	43	29*	2	14	...	88

\* This is the number notified.

#### SCARLET FEVER.

This disease has cropped up in various parts of the district. In a few cases it has been imported. Scarlet fever is prone to assume, especially of late years, an extremely mild type, and some cases are readily "missed" and not reported, and so keep the infection going. Several of the cases that I have seen have been so mild that they appear to be of the nature of the "fourth" disease—a sort of cross between German measles and scarlet fever. There has been only a slight rash, chiefly on the chest, a little sore throat, a slight temperature, and a little branny disquamation on the face afterwards. In about three days the patients appear to be perfectly well, and many parents resent



the quarantine to which the children are subjected ; but this is necessary, as I believe the disease is highly infectious during the first two or three weeks. And I have noticed that if care is not taken other untoward symptoms, such as abscess of the ears, frequently result from the children being allowed to go out too soon.

The outbreak at St. German's and the neighbouring parish of St. Peter's was of a much more decided character, and, in consequence, I decided to close the school for a short period. I was the more induced to do so on account of there being several other cases of illness and a good many cases of ringworm, the school attendance having fallen nearly 70 per cent. In the cases of ringworm no proper treatment was being adopted, and treatment by 'ink,' an utterly useless one, being almost generally adopted.

### ENTERIC FEVER.

A serious outbreak occurred at Fincham at the end of November, and has formed the subject of special reports to you, so that it will only be necessary for me to briefly refer to it.

The outbreak at the outset was complicated with symptoms of cerebro-spinal meningitis. With the assistance of the Inspector sent by the Local Government Board, the fullest investigations were made, and it was satisfactorily proved that the disease was typhoid fever. We were able to trace the origin to a man who kept cows and supplied milk to a part of the village, and who himself appears to have suffered from symptoms of typhoid. He had not been medically treated, and was able to keep on milking his cows. The well on his premises was found to be polluted and to contain a quantity of micro-organisms that might possibly have given rise to the outbreak ; but so far we have not been able to say definitely whether the well was the primary cause. Nearly all the cases had been supplied with this milk, and those who had not were found in some way or other to have come into contact with the other cases.

The outbreak occasioned a good deal of alarm and entailed a great amount of extra work upon all who had to deal with it. Altogether some 31 cases have been under observation, and five terminated fatally. Everything possible was done and no expense spared by the Board of Guardians and your Council to check the spread of the disease.

The epidemic has been remarkable for the unusual virulence and infectivity displayed. At first it seemed that the attacks were to be limited to a single member of the household, but later on several members became ill.

After such an outbreak I should very much doubt the propriety of putting typhoid fever cases in the general wards of an hospital.

The epidemic shows every sign of abating, and most of the cases are all doing very well ; but I am afraid that, owing to the lamentable ignorance and gross carelessness on the part of those who have had the disease in their houses, the possibility of further cases still exists.

A fatal case of enteric fever at Welney appears to have been contracted outside the district.

Another case, occurring on the Ten-Mile Bank, probably contracted it from drinking the river water.

#### MEASLES.

Measles were prevalent in Hilgay Fen during the close of the year.

#### VITAL STATISTICS.

The total number of Deaths in the district, including 16 persons dying in the Union Workhouse, but belonging to the district, was 221, equal to an annual death rate of 14·7. The number of deaths occurring in children below one year of age was 35, a decided improvement on the past few years. The returns show that there were 98 persons (or 44 per cent.) who died over the age of 70.

The total number of Births registered was 365 of, which 24 were illegitimate.

The following table will compare the births and deaths for the last ten years:—

**Table D.**

YEAR.	Births.	Birth Rate per 1000 pop-ulation.	Deaths.	Death Rate per 1000 pop-ulation.	Increase of Births over Deaths.	Infant Mortality under 1 Year.	Rate per 1000 Births.
1896	408	25·7	230	14·37	178	46	112·7
1897	436	28·1	284	16·5	151	84	192·06
1898	385	24·9	223	14·3	162	62	163·1
1899	395	25·7	261	17·3	134	55	139·2
1900	417	27·1	202	16·8	165	48	115·1
1901	411	27·6	230	15·5	181	44	106·1
1902	342	23·02	215	14·5	126	54	157·9
1903	362	24·4	213	14·3	149	36	99·4
1904	360	24·3	248	16·7	112	53	146·8
1905	365	24·3	221	14·7	144	35	95·8

The following table will compare the annual births, deaths and infantile mortality rates in various parts of the kingdom:—

**Table E.**

YEAR 1905.	Annual rates per 1000 living.			Infant Mortal-ity. Annual Deaths of Infants under one year per 1000 Births.
	Births.	Deaths from all causes.	Deaths from chief epidemic diseases.	
England and Wales ...	27·2	15·2	1·52	128
Rural England and Wales	26·3	14·9	1·09	113
76 Great Towns .. ...	28·2	15·7	1·88	140
141 Small Towns ... ..	26·9	14·1	1·50	132
Downham Rural District ...	24·3	14·7	·6	95·8





The following table shows the general mortality for the three sub-districts:—

**Table G.**

District	MORTALITY						VARIOUS CAUSES																	
	Under 1	Under 5	Under 15	Under 25	Under 65	Over 65	Total	Whooping Cough	Diphtheria	Enteric Fever	Diarrhoea	Phtthisis	Other Tubercular Diseases	Cancer	Pulmonary Diseases	Cirrhosis of Liver	Enteritis	Premature Births	Heart Diseases	Accidents	Suicides	Other Causes	Total	
Downham	13	8	4	1	27	41	84	1	1	3	1	4	2	11	8	2	1	1	7	5	5	..	37	84
Wiggenhall	17	5	2	1	19	35	79	1	..	..	..	3	2	5	13	..	1	1	7	4	4	..	42	79
Fincham ..	5	2	5	2	9	35	58	..	..	3*	1	2	..	..	7	1	..	1	9	..	1	33	58	
Total	35	15	11	4	45	111	221	2	1	6	2	9	4	16	28	3	2	3	23	9	1	112	221	

\* Two deaths from Enteric not registered.

## MILK SUPPLY.

The new bye-laws, under the Dairies, Cow Sheds and Milk Shops Act, came into force during the year, and a commencement has been made to improve some of the cow sheds and dairies.

Several of these have been inspected and registered. In some cases it has been found impossible to insist upon the strict conformity to the regulations, and it has been decided by your Council to take each case on its merits.

The beneficial action of these regulations are to a great extent negatived by their only applying to those dairies where milk is sold: they ought to apply to every cow-shed and dairy.

One of the effects of the regulations is to increase the difficulty of the poorer classes in obtaining milk, so necessary in cases of illness and in the rearing of young children. Surely this is an absurd anomaly in a rural district; and I am repeatedly informed by mothers that such is the case. Failing breast feeding for infants, the best substitute is cow's milk, properly treated and stored under conditions of scrupulous cleanliness. Children now-a-days do not seem to thrive on bread sop, as we are often told they did years ago: and we are learning that the bringing-up of children on nursery biscuits and prepared foods is acting injuriously on their constitutions. Much educational energy is mispent: we should consider the economical advantage of ensuring that all those who are taught at an enormous expense to the country are made and kept as fit as possible to receive the maximum benefit from that education.

## GENERAL HEALTH.

With the exception of the outbreak of typhoid fever at Fincham, and the scarlet fever at St. German's, the general health of the district has been fairly good.

Sanitary improvements of dwellings and surroundings do much to better the outward circumstances of the people, but they can make but little amends for faulty habits of life. By the development of a sanitary conscience in the community much of the communicable disease of the present day could be removed. Parents must remember that when they have an infectious disease in their house, they owe a duty to their neighbours, and should take care that they and their children do not communicate with others until all danger of infection is over.

There have been several cases of ringworm in the district, as well as other skin diseases. In nearly every school it is possible to trace the source of contagion to one or two families, who are often known to be excessively dirty. The law, if it permits the exclusion of such children from school, does not compel parents whose children suffer from contagious diseases either to seek medical advice or to act upon that advice when tendered. It is not right that such children should be allowed to sit in contact with healthy children, and if they come to school dirty they should be obliged to sit apart. Ordinary laws of hygiene, if impressed on children when young, would be certain to have beneficial results in after life.



There have been many changes of late years in matters relating to Public Health, and measures that formerly were adopted as sound are now condemned, and I have, therefore, endeavoured, whilst recommending improvements of various kinds, to keep this in mind, and also to study the expense that might unnecessarily be put either upon your Council or upon owners of property, who as a rule have carried out the recommendations of your Council most readily. But I do think that a great amount of work might be saved if such owners recognised the responsibility that rests on them to see that their property is kept in good repair, that their tenants were supplied with proper receptacles, and that their wells were safeguarded. These things ought not to be left until discovered by a visit from a sanitary official or by an outbreak of infectious disease.

The problems of public health change with altered circumstances, and new ones are constantly being evolved. The public health worker, therefore, can never hope for a complete realization of his schemes and his ambitions, and to his labours there can be no end.

“ Does the road wind uphill all the way ?

Yes, to the very end.

Will the day's journey take the whole long day ?

From morn till night, my friend.

I remain, Gentlemen,

Your obedient servant,

GEO. FRED. CROSS.